

WHAT IS CLAIMED IS:

1. A light source device attached to an optical equipment provided with a light-source cooling fan thereinside, comprising:
 - 5 a light source;
 - a reflector that has a concave curved reflection surface and houses the light source thereinside, the reflector irradiating a radial light beam from the light source after aligning in a predetermine direction;
 - 10 a light-transmissive component that covers a light-irradiation side of the reflector;
 - a light source housing that houses the light source, the reflector and the light-transmissive component,
 - wherein an opening that introduces a cooling air to the light source is formed on the reflector, and
 - 15 wherein the light source housing has a cooling-air-introducing opening formed at a position corresponding to the position of the opening of the reflector and a duct that protrudes from the light source housing to be connected with a discharge hole of the fan when the duct is attached to the optical equipment.
2. The light source device according to claim 1,
 - 20 wherein the duct also works as a shutter that closes the opening formed on the light source housing.
3. The light source device according to claim 1,
 - 25 wherein the light source housing has a positioning surface that locates the reflector in a direction of the light beam irradiated by the reflector, and
 - wherein the duct is slidably attached to a surface of the light source housing intersecting the positioning surface.
4. The light source device according to claim 2,
 - 30 wherein the light source housing has a positioning surface that locates the reflector in a direction of the light beam irradiated by the reflector, and
 - wherein the duct is slidably attached to a surface of the light source housing

intersecting the positioning surface.

5. A projector, comprising:
 - a light source;
 - an optical modulator that modulates a light beam irradiated by the light source in accordance with image information to form an optical image;
 - a projection optical system that enlarges and projects the optical image;
 - a fan that cools the light source; and
 - a light source device according to claim 1.
6. The projector according to claim 5,
 - further comprising a casing that houses an apparatus body including the optical modulator thereinside,
 - the casing having an opening from which the light source device is attached and detached,
 - wherein a lid component that closes the opening is attached to the opening, and
15. The projector according to claim 6,
 - wherein the lid component is attached by sliding along a side of the casing, and
 - wherein a projection that engages with the duct to protrude the duct relative to the light source housing is formed on an inner surface of the lid component.
7. The projector according to claim 5,
 - wherein the duct also works as a shutter that closes the opening formed on the light source housing.
8. The projector according to claim 5,
 - wherein the light source housing has a positioning surface that locates the reflector in a direction of the light beam irradiated by the reflector, and
 - wherein the duct is slidably attached to a surface of the light source housing intersecting the positioning surface.
10. The projector according to claim 8,

wherein the light source housing has a positioning surface that locates the reflector in a direction of the light beam irradiated by the reflector, and

wherein the duct is slidably attached to a surface of the light source housing intersecting the positioning surface.